GAMING MACHIN DISPLAY

FIELD OF THE INVENTION

[0001] This invention relates to a gaming machine. More particularly, the invention relates to a gaming machine display, to a display means for a gaming machine display and to a method of displaying images on a gaming machine.

BACKGROUND TO THE INVENTION

[0002] Players who regularly play gaming machines are, increasingly, demanding more features on the gaming machines. Venues which make use of gaming machines as a source of revenue also desire enhanced gaming machines to attract players to improve their source of revenue.

[0003] Various ways of enhancing gaming machines by means of the games played thereon have been proposed by the applicant.

[0004] However, in general, few changes have been made to the gaming machines themselves, apart from changes to cabinet design, or the like, in an attempt to modernise the appearance of the gaming machine and to enhance images displayed on a primary display of the gaming machine.

[0005] In addition, it is becoming increasingly popular to provide bonus events in the form of second screen features. Such second screen features may occur on a secondary display of the gaming machine. Where the secondary display is vertically spaced with respect to the primary display of the gaming machine, it requires a player to adopt a different vertical, viewing orientation. This can become taxing to a player leading to fatigue and, potentially, muscle pain. As a result the player's enjoyment of the gaming activity is reduced leading to the player's activity being curtailed. This defeats the purpose of adding the additional features to attract and retain players.

SUMMARY OF THE INVENTION

[0006] According to a first aspect of the invention, there is provided a gaming machine display which includes:

[0007] a game playing arrangement mountable in a cabinet of a gaming machine; and

[0008] an electronically controlled display means overlying the game playing arrangement, in use, so that, depending on a state of the display means, the game playing arrangement is visible through the display means.

[0009] Preferably, the game playing arrangement comprises an electro-mechanical, symbol carrying arrangement. The symbol carrying arrangement may comprise a set of rotatable mechanical reels, a plurality of symbols being arranged on an outer periphery of each reel.

[0010] The display means may comprise a display screen overlying the game playing arrangement. Preferably, the display screen is a multi-layered structure.

[0011] The structure may include a monitor on which images are to be displayed. In this specification, the term "monitor" is to be understood in a broad sense as any device on which varying images are displayed. In a preferred embodiment of the invention, the monitor is a flat panel, liquid crystal display (LCD).

[0012] The monitor may overlie a shutter mechanism. The shutter mechanism may be an electronically controlled device that is controllable to vary between a transparent state, in which the game playing arrangement is visible through the device, and an at least partially opaque state, in which the game playing arrangement is at least partially occluded. The shutter mechanism may be formed of electrically responsive crystals which change phase depending on a control signal applied to them. Thus, for example, the shutter mechanism may be formed of nematic curvilinear aligned phase (NCAP) liquid crystals.

[0013] The display may include a monitor housing defining a plurality of openings, one opening being associated with each reel, a part of the outer periphery of each reel being visible through its associated opening.

[0014] The electronically controlled device may therefore define a plurality of zones, each zone, in use, overlying one of the openings of the monitor housing and, hence, one of the reels, and each zone being controllable to vary between the transparent state, in which the associated reel is visible through that zone, and an at least partially opaque state, in which said reel is at least partially occluded.

[0015] A user interface layer may overlie the monitor. The user-interface layer may be implemented as a touchscreen. The touchscreen may employ surface acoustic wave technology.

[0016] In a preferred embodiment of the invention, the multi-layered structure may include an illuminating layer for illuminating the monitor. The illuminating layer may comprise a light transferring panel and an illuminating means arranged adjacent at least one edge of the panel. The panel may be a panel of a synthetic plastics material that is interposed between the monitor and the shutter mechanism.

[0017] In another embodiment of the invention, the game playing arrangement may be illuminated to render it visible through the monitor. The intensity of the illumination may be adjustable for adjusting the degree of visibility of the game playing arrangement through the monitor. In other words, by adjusting the illumination, the effect is created of adjusting the transparency of the monitor.

[0018] The monitor may be arranged in spaced relationship relative to the game playing arrangement such that, when an image appears on the monitor, it imparts a three-dimensional effect to a scene comprising the game playing arrangement and the image on the monitor. For example, win lines may be indicated on the monitor after a win occurs. The win lines may be animated over the top of those symbols of the game playing arrangement which make up the winning combination or winning combinations to highlight the win or wins, as the case may be.

[0019] In another embodiment of the invention, instead of the multi-layered structure, the display means may be a flat panel display, more particularly, a flat panel, liquid crystal display, alone.

[0020] According to a second aspect of the invention, there is provided a display means for a gaming machine display, the display means including:

[0021] a monitor on which images are to be displayed; and